

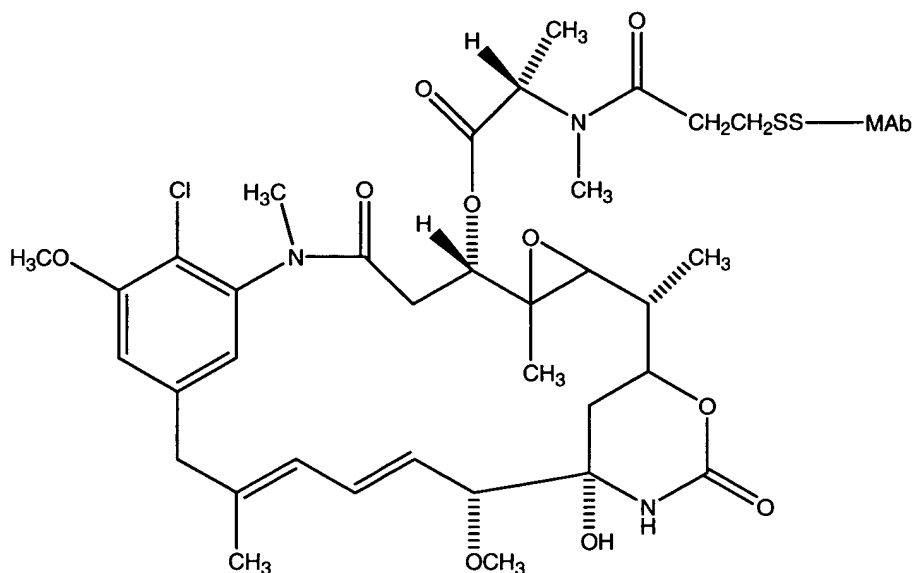
Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-104. (Canceled)

105. (Previously presented) A pharmaceutical composition comprising a synergistic combination of at least one chemotherapeutic agent and at least one immunoconjugate; wherein the chemotherapeutic agent is a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof; and wherein the immunoconjugate is:



wherein MAB is a monoclonal antibody or fragment thereof that binds to an antigen expressed by a cancer cell.

106. (Currently amended) A kit comprising a synergistic combination of a therapeutically effective amount of at least one chemotherapeutic agent and a therapeutically effective amount of at least one immunoconjugate; wherein the immunoconjugate comprises at least one maytansinoid compound linked to a monoclonal antibody or fragment thereof; and

wherein the monoclonal antibody or fragment thereof binds to an antigen expressed by a cancer cell.

107. (Previously presented) The kit of claim 106, wherein the chemotherapeutic agent is a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

108. (Previously presented) The kit of claim 106, wherein the chemotherapeutic agent is a taxane compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof.

109. (Previously presented) The kit of claim 106, wherein the chemotherapeutic agent is paclitaxel, docetaxel, epothilone A, epothilone B, epothilone C, epothilone D, epothilone E, epothilone F, cisplatin, carboplatin, oxaliplatin, iproplatin, ormaplatin, tetraplatin, etoposide, teniposide, camptothecin, topotecan, irinotecan, 9-aminocamptothecin, or a mixture of two or more thereof.

110. (Previously presented) The kit of claim 106, wherein the chemotherapeutic agent is paclitaxel, cisplatin, etoposide, docetaxel, topotecan, or a mixture of two or more thereof.

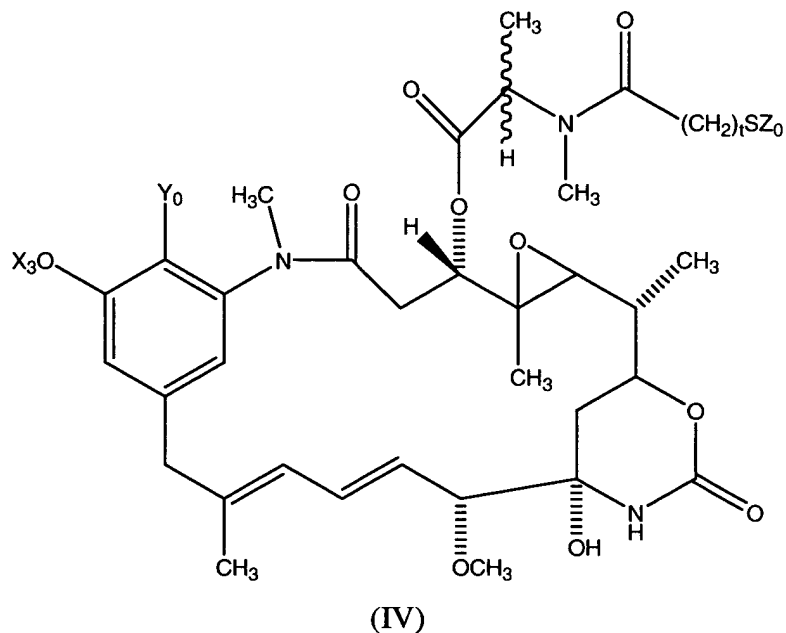
111. (Previously presented) The kit of claim 106, wherein the monoclonal antibody or fragment thereof binds to a CD56 antigen.

112. (Previously presented) The kit of claim 106, wherein the monoclonal antibody or fragment thereof is at least one of Fv, Fab, Fab' or F(ab')₂.

113. (Previously presented) The kit of claim 106, wherein the monoclonal antibody or fragment thereof is humanized N901.

114. (Previously presented) The kit of claim 106, wherein the monoclonal antibody or fragment thereof is humanized C242.

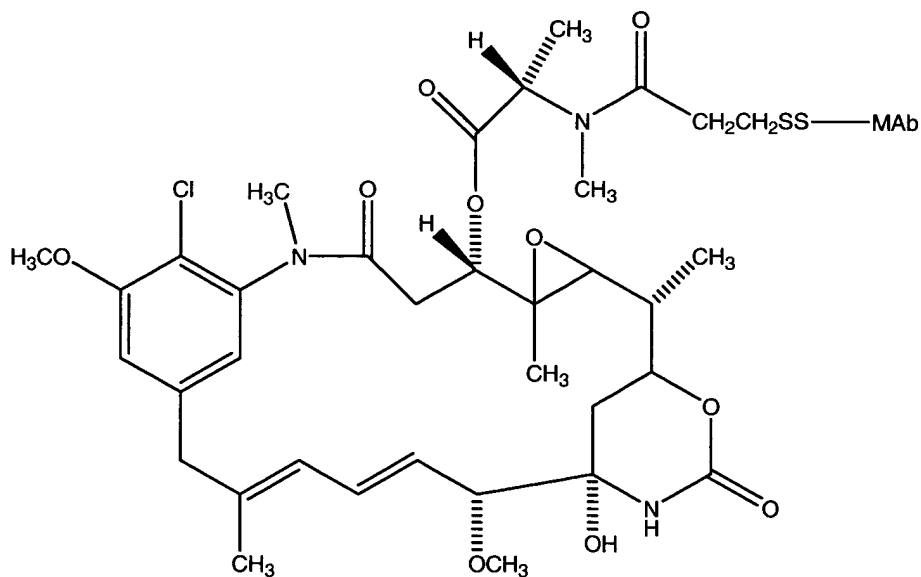
115. (Previously presented) The kit of claim 106, wherein the immunoconjugate comprises at least one maytansinoid compound of formula (IV):



wherein Z_0 is H or SR; R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

116. (Previously presented) The kit of claim 115, wherein Z_0 is H; t is 2; Y_0 is chlorine; and X_3 is methyl.

117. (Previously presented) The kit of claim 106, wherein the immunoconjugate is:

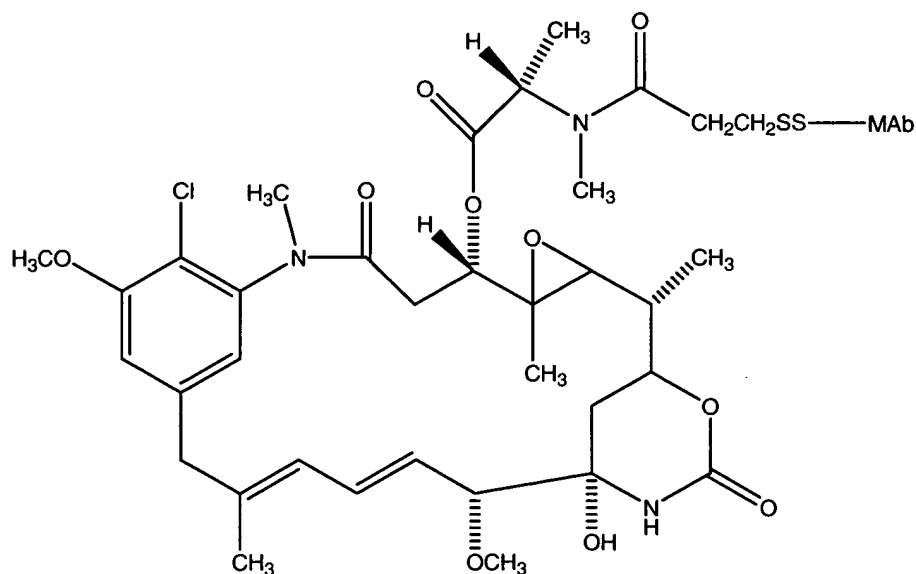


wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by the cancer cell.

118. (Previously presented) The kit of claim 106, wherein the immunoconjugate and chemotherapeutic agent are separate components in the kit.

119. (Previously presented) The kit of claim 106, wherein the immunoconjugate and chemotherapeutic agent are in the form of a composition in the kit.

120. (Previously presented) A kit comprising a synergistic combination of at least one chemotherapeutic agent selected from the group consisting of a taxane compound, an epothilone compound, a platinum compound, an epipodophyllotoxin compound, a camptothecin compound, or a mixture of two or more thereof; and at least one immunoconjugate represented by:

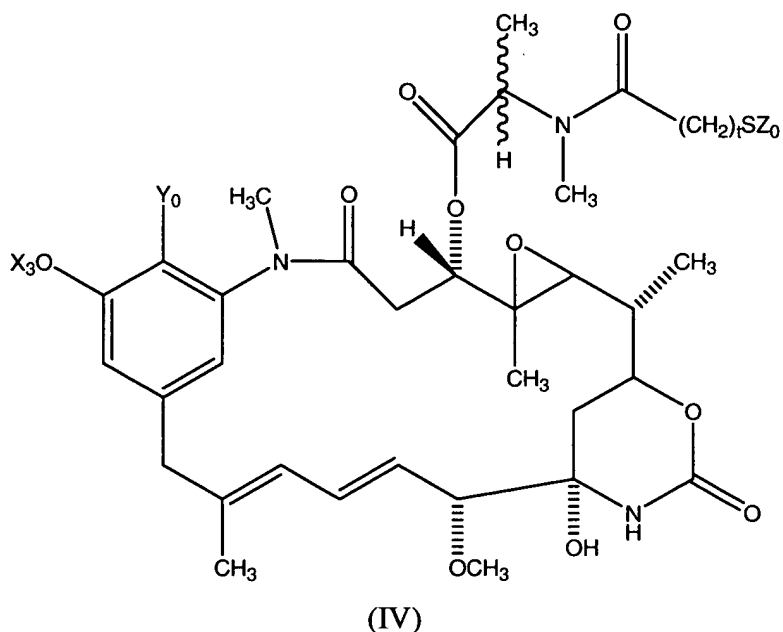


wherein MAb is a monoclonal antibody or fragment thereof that binds to an antigen expressed by a cancer cell.

121-143. (Canceled)

144. (Currently amended) A pharmaceutical composition comprising a synergistic combination of a therapeutically effective amount of (i) at least one chemotherapeutic agent selected from the group consisting of paclitaxel, docetaxel, cisplatin, etoposide, topotecan and irinotecan and (ii) an immunoconjugate comprising a maytansinoid and a humanized monoclonal antibody selected from the group consisting of N901 and C242.

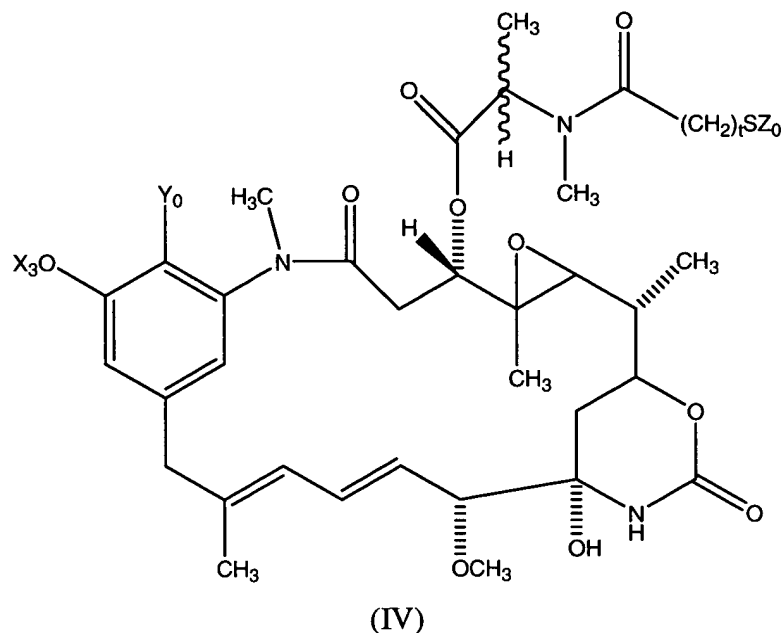
145. (Previously presented) The pharmaceutical composition of claim 144, wherein the maytansinoid is a compound of formula (IV):



wherein Z_0 is H or SR; wherein R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

146. (Currently amended) A kit comprising a synergistic combination of a therapeutically effective amount of (i) at least one chemotherapeutic agent selected from the group consisting of paclitaxel, docetaxel, cisplatin, etoposide, topotecan and irinotecan and (ii) an immunoconjugate comprising a maytansinoid and a humanized monoclonal antibody selected from the group consisting of N901 and C242.

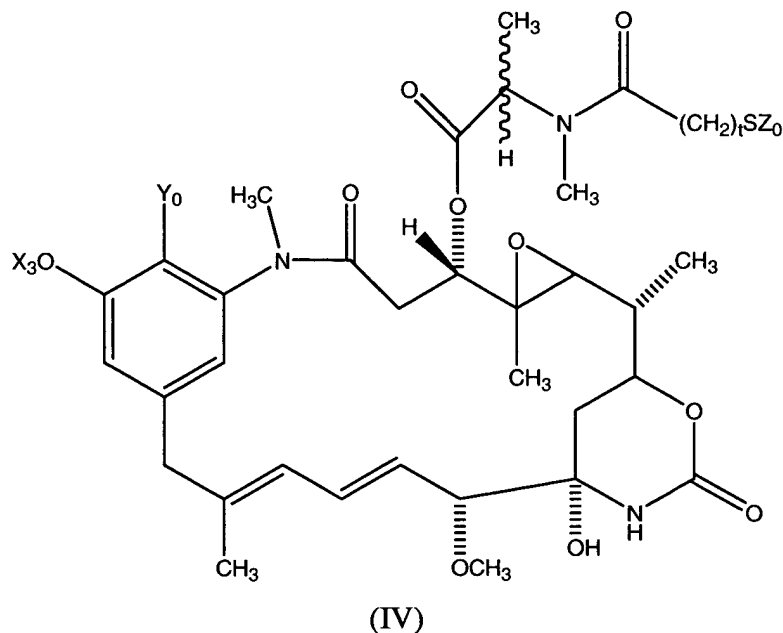
147. (Previously presented) The kit of claim 146, wherein the maytansinoid is a compound of formula (IV):



wherein Z_0 is H or SR; wherein R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

148. (Currently amended) A pharmaceutical composition comprising a synergistic combination of a therapeutically effective amount of (i) at least one chemotherapeutic agent selected from the group consisting of paclitaxel, docetaxel, cisplatin, etoposide, topotecan and irinotecan and (ii) an immunoconjugate comprising a maytansinoid and a humanized monoclonal antibody or fragment thereof that binds to an antigen expressed by a small cell lung cancer cell, a non small cell lung cancer cell or a colorectal cancer cell.

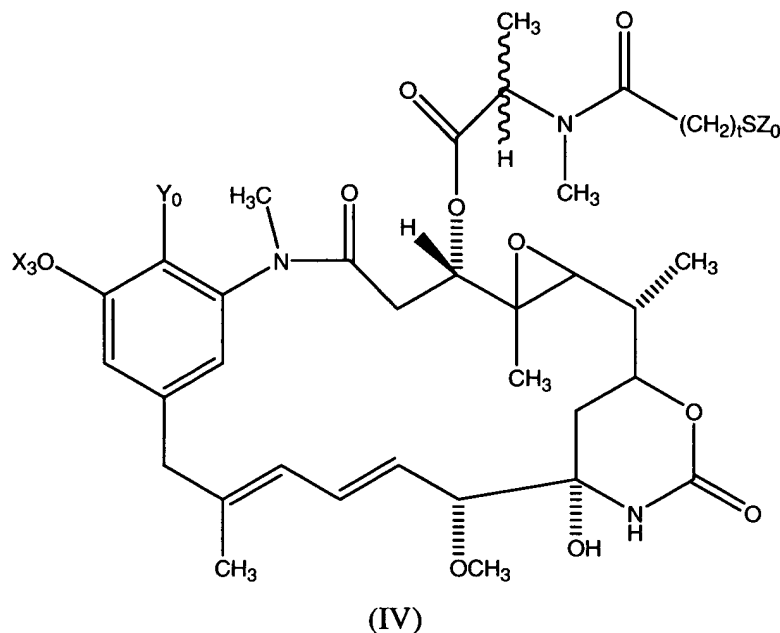
149. (Previously presented) The pharmaceutical composition of claim 148, wherein the maytansinoid is a compound of formula (IV):



wherein Z_0 is H or SR; wherein R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

150. (Currently amended) A kit comprising a synergistic combination of a therapeutically effective amount of (i) at least one chemotherapeutic agent selected from the group consisting of paclitaxael, docetaxel, cisplatin, etoposide, topotecan and irinotecan and (ii) an immunoconjugate comprising a maytansinoid and a humanized monoclonal antibody or fragment thereof that binds to an antigen expressed by a small cell lung cancer cell, a non small cell lung cancer cell or a colorectal cancer cell.

151. (Previously presented) The kit of claim 150, wherein the maytansinoid is a compound of formula (IV):



wherein Z_0 is H or SR; wherein R is methyl, linear alkyl, branched alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y_0 is chlorine or hydrogen; and X_3 is hydrogen or methyl.

152. (New) A composition having therapeutic synergy to modulate growth of a selected cell population comprising an effective amount of at least one chemotherapeutic agent selected from a taxane compound, a camptothecin compound, an epipodophyllotoxin compound, or a platinum compound and at least one immunoconjugate, wherein the immunoconjugate comprises at least one maytansinoid linked to a monoclonal antibody or a fragment thereof such that the therapeutic synergy results in modulation of the selected cell population.

153. (New) The composition of claim 152, wherein the composition comprises a mixture of two or more of the chemotherapeutic agents.

154. (New) The composition of claim 152, wherein the selected cell population is derived from cancer, autoimmune diseases, graft rejections, viral infections, or parasite infections.

155. (New) The composition of claim 151 or 152, wherein the at least one chemotherapeutic agent is an anti-proliferative agent.

156. (New) The composition of claim 154, wherein the anti-proliferative agent is paclitaxel, docetaxel, epothilone A, epothilone B, epothilone C, epothilone D, epothilone E,

epothilone F, cisplatin, carboplatin, oxalipaltin, iproplatin, ormaplatin, tetraplatin, etoposide, teniposide, camtothecin, topotecan, irinotecan, 9-aminocampothechin, or a mixture of two or more thereof.

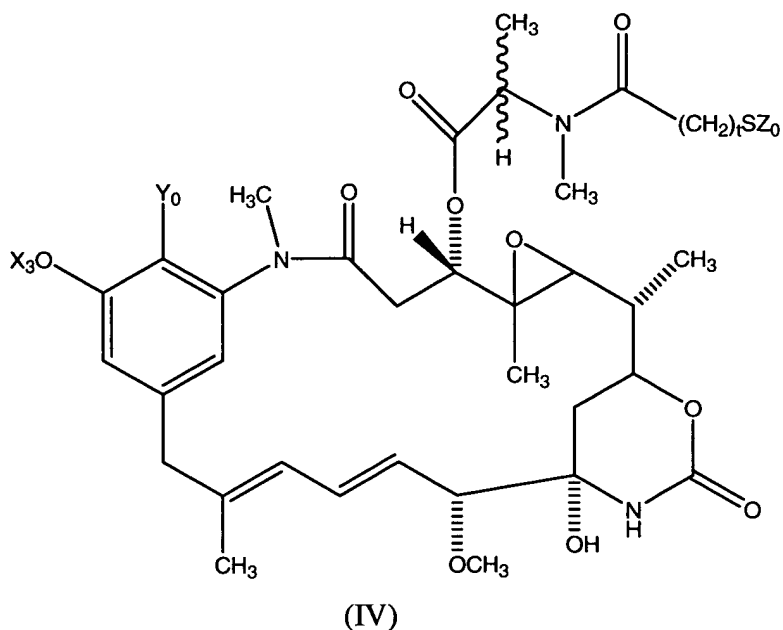
157. (New) The composition of claim 154, wherein the anti-proliferative agent is paclitaxel, cisplatin, etoposide, docetaxel, topotecan, or a mixture of two or more thereof.

158. (New) The composition of claim 152, wherein the monoclonal antibody or a fragment thereof is at least a Fv, a Fab, a Fab' or a F(ab')₂.

159. (New) The composition of claim 152, wherein the monoclonal antibody or a fragment thereof is a humanized N901.

160. (New) The composition of claim 152, wherein the monoclonal antibody or a fragment thereof is a humanized C242.

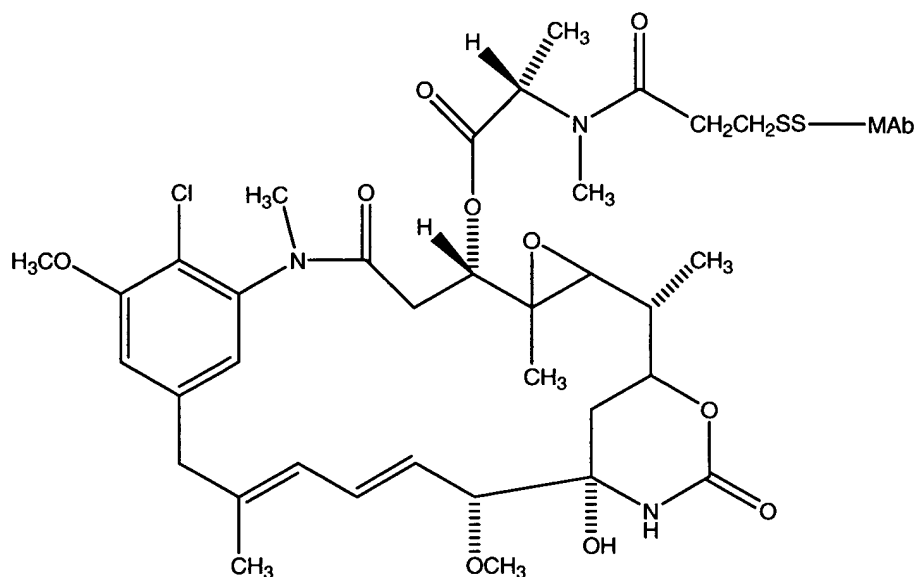
161. (New) The composition of claim 152, wherein the immunoconjugate comprises at least one maytansinoid compound of formula (IV):



wherein Z₀ is H or SR; R is methyl, linear alkyl, cyclic alkyl, simple or substituted aryl or heterocyclic; t is 1, 2 or 3; Y₀ is chlorine or hydrogen; and X₃ is hydrogen or methyl.

162. (New) The composition of claim 161, wherein Z₀ is H: t is 2; Y₀ is chlorine; and X₃ is methyl.

163. (New) The composition of claim 152, wherein the immunoconjugate is of the formula:



wherein MAb is a monoclonal antibody or a fragment thereof that binds to an antigen expressed by a cancer cell.